

Disk Doctor

With this program, you can physically work on your disks for the VZ200 and VZ300 computers.

You can directly read each sector on the disk, have it displayed in hexadecimal, make modifications and write it back to disk.

Allows any checksum errors on the disk to be ammended, as long as there is no physical damage to the magnetic layer, by reading the defective sector and then writing it back correctly.

Operating directions

The program is loaded from disk and run with BRUN"DOC". After correctly loading, a title screen appears, which requests from you the address details necessary to read the first sector.

Drive (1/2)

Select the desired drive by entering "1" or "2".

Track(00-27)

Enter the desired track on the disk in hexadecimal notation. Two digits must always be entered eg, 0F and not just F.

Sector(0-F)

Enter in hexadecimal the sector to be addressed on the track selected above.

Each time the permissable value range is given in brackets. All other input except this, CTRL-BREAK and "Q" will be ignored.

Entering "Q", instead of the input outlined above, will end the program and reinitalise the computer.

Simultaneously pressing of "CTRL" and "BREAK" at any point will result in a restart, and the title screen will again appear. You must, for example, use this method if you wish to change to the other disk drive.

Correctly enter all address values for a sector and it will be read from the disk and displayed on the screen.

This display is made up as follows:

In the left three columns, the track and sector numbers are given in hexadecimal.

On the right next to them are the relative sector addresses, two digits hexadecimal numbers from 00 to 78. These always refer to the first byte of each line. Each eight bytes of the sector is listed in hexadecimal notation, in two four byte blocks per line.

In the right hand eight columns there follows the ASCII equivalent of these eight bytes. Those ASCII codes not able to be displayed are replaced by ".".

+ or RETURN - Move forward ie, the next sector on the disk will be read and displayed.

- - Move backwards ie. the previous sector on the disk will be read.

A - New track and sector address. You will be asked to enter the TRACK and SECTOR again.

M - Make changes in the MODIFY mode. You can alter the sector contents and then write the sector back to disk.

CTRL BREAK - Restart the program.

Q - Quit the program.

When reading a sector you can encounter the following errors:

SECTOR NOT ADDRESSED

Address data marks of the addressed sector cannot be found on the disk.

After pressing the RETURN key the program returns to the track and sector selection.

CHECKSUM ERROR ENCOUNTERED

During reading of the sector a checksum error is detected in the data field of the sector. After pressing RETURN the sector contents will be displayed and can then be worked on. When this sector is written back the checksum will be automatically corrected.

Operating directions in MODIFY mode.

When you have the sector display, press the M key to change the program to the MODIFY mode.

It is recognisable, in that one of the displayed digits in the sector contents flashes.

In this mode you can alter the sector contents and write the sector back to disk.

The following operating functions are at your disposal.

Arrow keys (+CTRL) - With these you can position the flashing cursor to the desired place in the data field of the sector.

O-F - Pressing one of these keys alters the sector contents in the internal buffer. The ASCII display on the right side is automatically altered with it.

Q - Pressing Q returns you to the display mode, all alterations to the sector will be cancelled.

CTRL-BREAK - Restarts the program.

RETURN - Write the sector back to disk.

You will be asked next if all alterations are correct. The "Y" key will write the sector to disk. Pressing the "N" will return you to the MODIFY mode. After a sector is written to disk, it will, on completion, be shown on the screen in the display mode.

By entering a new address or by stepping forwards or backwards, another sector can be displayed.

When writing a sector, just as when reading, an error can occur, where the address of a sector isn't found. In such cases, an error message is displayed. After pressing RETURN another attempt will be made to read the sector.